DOCKET NO: 5244-0104-2X

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

RE APPLICATION OF   :

TETSURO MOTOYAMA ET AL.   : EXAMINER: ZIA, S.

SERIAL NO: 09/440,692   :

FILED: NOVEMBER 16, 1999   : GROUP ART UNIT: 2131

FOR: REMOTE SYSTEM USAGE   :
MONITORING WITH FLEXIBLE
ENCODING AND DECODING OBJECTS

APPEAL BRIEF

COMMISSIONER FOR PATENTS
ALEXANDRIA, VIRGINIA 22313

SIR:

Applicants appeal the rejection in the Office Action of March 29, 2004.

I. REAL PARTY IN INTEREST

The present application is assigned to Ricoh Company, Ltd., having a place of

business at 3-6 Nakamagome 1-chome, Ohta-ku, Tokyo 143-8555 Japan, and that party is the

real party in interest in the present appeal.

II. RELATED APPEALS AND INTERFERENCES

Appellant, appellants' legal representatives, and the assignee are not aware of any

other appeals or interferences that would directly affect or be directed affected by or having a

bearing on the Board's decision in the pending appeal.

III. STATUS OF CLAIMS

Claims 1, 3-9, 11-17, 19-25, and 27-32 are pending in this application, and each of claims 1, 3-9, 11-17, 19-25, and 27-32 is on appeal. Claims 2, 10, 18 and 26 were canceled during prosecution.

IV. STATUS OF AMENDMENTS

No amendment is outstanding and all previously submitted amendments have been entered.

V. SUMMARY OF THE INVENTION

The claimed invention is directed to a system, a method, and a computer program product that all operate to monitor usage of an interface of a target application, the interface including a plurality of operations to be selected by a user, and that then send a message with a log file of monitored usage data to a destination.

More particularly, in the claimed invention, and with reference to Figures 9-11 in the present specification as a non-limiting example, a device 300 includes a user interface 510. Figures 10 and 11 show specific embodiments of user interfaces 600, 700, the embodiment of Figure 10 showing a monitor 600 of a workstation as a user interface and the embodiment of Figure 11 showing an operation panel 700 of an image forming device as a user interface. (See also the present specification at page 18, line 11, to page 19, line 24.)

Further, in the claimed invention a monitoring is executed to monitor data of selecting of the plurality of operations of the interface by the user, and to encode and store the monitored data into a log file in the device. (See for example the monitoring block 1200 in Figures 12A, 12B, which includes an encoding operation 1610 and a logging operation 1315, and the corresponding discussion in the present specification at page 20, line 6 et seq.)

Further, a communicating device receives the log file of the monitored data, decodes the stored encoded log file, creates a message of the monitored data, and communicates the message of the monitored data. (See for example the sending block 1600 in Figures 12A, 12B and also Figure 17 in the present specification.)

Further, the monitoring device includes a control to automatically start the monitoring without an input from a device to which the message of the monitored data is to be communicated. (See for example the present specification at page 21, line 19 et seq., and particularly lines 19-20 that state that Figure 13 shows that when a target application starts up a startMonitoring function is called. As evident from that discussion in the present specification and from Figure 13 no input from a device to which the message of the monitored data is to be communicated is needed to begin the monitoring operation.)

Further, the communicating device includes a control to automatically communicate the message of the monitored data by a unidirectional communication without requiring input from the device to which the message of the monitored data is to be communicated. (That subject matter is evident from Figure 17 in the present specification showing the operation of the sending block 1600 and the corresponding description thereof in the present specification at page 27, line 21 et seq. At that portion it is clear that the message of the monitored data is sent without requiring an input from the device to which the message of the monitor data is to be communicated.)

VI. ISSUES

The only issue outstanding in the above-identified application is whether each feature recited in claims 1, 3-9, 11-17, 19-25, and 27-32 is fully met by the teachings in U.S. patent 6,018,619 to Allard et al. (herein "Allard").

VII. GROUPING OF CLAIMS

Each of claims 1, 9, 17, and 25 are grouped together and thereby stand and fall together. That group includes independent claims 1, 9, 17, and 25.

Dependent claims 3, 11, 19, and 27 are believed to recite further limitations distinguishing over the applied art to Allard, and thus are grouped separately.

Dependent claims 4, 12, 20, and 28 are believed to recite further limitations distinguishing over the applied art to Allard, and thus are also grouped separately.

Dependent claims 5, 13, 21, and 29 are believed to recite further limitations distinguishing over the applied art to Allard, and thus are also grouped separately.

Dependent claims 6, 14, 22, and 30 are believed to recite further limitations distinguishing over the applied art to Allard, and thus are also grouped separately.

Dependent claims 7, 15, 23, and 31 are believed to recite further limitations distinguishing over the applied art to Allard, and thus are also grouped separately.

Dependent claims 8, 16, 24, and 32 are believed to recite further limitations distinguishing over the applied art to Allard, and thus are also grouped separately.

VIII. ARGUMENT

As noted above the only issue pending in the outstanding Office Action is whether each element positively recited in claims 1, 3-9, 11-17, 19-25, and 27-32 is fully met by the teachings in Allard. Applicants respectfully submit that each of the claims positively recites features neither taught nor suggested by Allard.

Independent Claims 1, 9, 17, 25

The above-noted claims positively recite several features neither taught nor suggested by Allard.

Each of independent claims 1, 9, 17, and 25, and thereby the claims dependent

therefrom, requires "a device comprising an interface, the interface comprising a plurality of

operations to be selected by a user".

Each of independent claims 1, 9, 17, and 25, and thereby the claims dependent

therefrom, also requires either a monitoring device or a monitoring operation to

"automatically start the monitoring, without an input from a device to which the message of

the monitored data is to be communicated".

Each of independent claims 1, 9, 17, and 25, and thereby the claims dependent

therefrom, also requires either a communication device or a communication operation to

"automatically communicat[e] the message of the monitored data by a unidirectional

communication without requiring input from the device to which the message of the

monitored data is to be communicated"

Such features positively recited in the claims set forth an operation and structure that

clearly differs from the teachings in <u>Allard</u>.

The claims as currently written are directed to a system, method, or computer

program product that include a device comprising an interface with a plurality of options to

be selected by a user. The user's selection of those pluralities of options is monitored,

encoded, and stored into a log file, all without an input from a device that ultimately will

receive the log file. A communicating device receives the log file of the monitored data,

decodes the stored encoded log file, creates a message of the monitored data, and

communicates that message of the monitored data by a unidirectional communication without

requiring input from a device to which the message of the monitored data is communicated.

That is, in the claimed invention the destination device to which the monitored data is to be

communicated does not need to establish a prior connection to the communicating device, nor

5

does that destination device need to provide any instructions for authorization of the monitoring, encoding, storing, or communicating operations.

Allard is directed to a method for tracking usage patterns of users of hyper-media systems such as on the World-Wide-Web (WWW). In order for the system of Allard to properly operate, a client system server (i.e. the destination device to which the tracked data is to be sent) must be connected at the time of an initial session beginning. That operation is evident for example in Figure 3 of Allard in which step 54 monitors a session beginning event, and when a session beginning event is detected, contact with a server is initiated in step 60. Then in step 64 the server (i.e. the destination device) must make an acknowledgment. Thus, in Allard before any monitoring operation can be executed, contact with a server must be initiated, and a server acknowledgment, i.e., an input from the destination device server, is then required. From such an operation it is clear that Allard requires a client system connected to a server destination device through a bi-directional communication connection and with a required input from the server destination device to even begin the monitoring operation.

First, applicants note that the claimed invention appears to differ from a fundamental basis from the device in Allard. In Allard the application program running on the client machine is a browser. Given that the browser is the application program, the only possible interaction between the user and the browser is on the menu of the browser, for example the controls such as "File", "Edit", "View", "Favorites", "Tools", and "View" on a browser such as MicroSoft's Internet Explorer. In Allard there is no method described to monitor the interaction of a user with such a browser. In such ways, Allard differs from the claims in a basic manner.

Moreover, applicants submit that the outstanding rejection is improper in that it does not even clearly set forth what elements in Allard are being applied against the claim features.

6

The claims recite specific structures and operations and the outstanding rejection does not correspond any element in Allard to the corresponding structures and operations.

For example, with respect to the claim 1 limitation to the "device comprising an interface of a target application, the interface comprising a plurality of operations to be selected by a user", the outstanding rejection in the March 29, 2004 Office Action cites Allard at column 1, lines 50-60 and column 5, lines 22-26.[1] In that respect it is unclear what element in Allard is being cited to correspond to the claimed "device". At column 1, lines 50-60 Allard broadly mentions in the "Present State of the Art" section that a user can access a hypertext document, which appears to have no relevance whatsoever to the claimed "device". Further, at column 5, lines 22-26 Allard merely broadly refers to a "computer program product for client-side usage tracking in the information server" being provided. How such teachings are being applied to the claimed "device" is completely unclear.

Similarly each of the positively recited claim limitations is addressed in the same manner and only references to broad teachings in Allard are cited to correspond to each claim limitation. It is unclear what elements in Allard are being cited to meet the claim limitations.

With respect to the "monitoring device" of Claim 1 the March 29, 2004 Office Action cites the teachings in Allard at column 5, lines 1-3 and column 9, lines 10-19.[2] In response to that position applicants note that again such teachings in Allard are just broad generalizations directed to being able to collect or log data at a server, and particularly an information server containing a usage log buffer. In that respect applicants note the claims require that the monitored data is provided in a log "in the device", the device again including the interface. The noted reference to the information server 10 in Allard at column 9, lines 10-19 appears to be cited to correspond to the claimed "device". However, such a basis for the outstanding rejection is clearly nonsensical as the information server 10 in Allard is merely that, a server,

---

[1] Office Action of March 29, 2004, page 5, second paragraph of prenumbered point 2.
[2] Office Action of March 29, 2004, page 5, third paragraph of prenumbered point 2.

7

and that server 10 does not include any type of "interface comprising a plurality of operations to be selected by a user".

With respect to the claimed "communicating device", the March 29, 2004 Office Action merely cites the teachings in <u>Allard</u> at column 9, lines 10-42.[3] In that respect at column 9, lines 10-42 <u>Allard</u> does disclose the client 16 being connected to an information server, but such teachings do not appear even related to the claimed "communicating device".

Similarly, with respect to the further claimed features of the "monitoring device includ[ing] a control to automatically start the monitoring without an input from a device to which the message of the monitored data is to be communicated", and the "communicating device includ[ing] a control to automatically communicate the message of the monitored data by a unidirectional communication without requiring input from the device to which the message of the monitored data is to be communicated", the cited teachings in <u>Allard</u> at column 10, lines 11-29 and column 11, line 48 to column 12, line 67, respectively, are unclear as to what actual elements are being relied upon to meet the claim limitations.

Applicants respectfully submit that failure to properly set forth how the teachings and specific elements in <u>Allard</u> are being applied against the claims renders the outstanding rejection under 35 U.S.C. §102(e) clearly improper. For such a basis alone, the outstanding rejections based on <u>Allard</u> must be REVERSED.

Moreover, applicants submit that the teachings in <u>Allard</u> cannot be properly applied against the claim limitations because <u>Allard</u> simply does not teach a device even similar to the claimed features.

<u>Allard</u> does disclose devices being monitored, specifically clients 16 and 20, for example in Figure 1 therein. However, in <u>Allard</u> those clients 16 and 20 do not themselves store any log of monitored data. Instead, in <u>Allard</u> the log of the monitored data is stored in a

---

[3] Office Action of March 29, 2004, page 5, fourth paragraph of prenumbered point 2.

tracking client such as usage log 38, 40, see for example Figure 2, which is part of a server system that the clients 16 and 20 log into.

Such differences between the claimed invention and the device in Allard result from the claimed invention and the device of Allard having fundamentally different objectives.

One objective of the claimed device is to provide a simple system that can monitor a user's usage of an interface of a device itself, such as an image forming device. In contrast, Allard is only directed to how different websites are utilized by a user. In Allard a user's usage of the actual client 16, 20 is not relevant, but only how the user utilizes a website is relevant in Allard.

Stated another way, the claimed invention is directed to monitoring how a user uses an interface on a device such as an image forming apparatus. Allard teaches no such features. For Allard to teach such features, Allard would have to be concerned with how the interfaces on the clients 16, 20 were utilized. Allard is not concerned with such features but is only concerned with how a user of the clients 16, 20 searches utilizing the world wide web (www). In such ways, Allard clearly does not teach or suggest the claimed features of the device including an interface being monitored also operating to store a log of the monitored data in that same device, as required in each of the independent claims.

The noted claims also differ from the teachings in Allard as in the claims as currently written there is no bi-directional communication required, i.e. no input is needed from a destination server, to begin the monitoring operation or to communicate the message of the monitored data. That is, in the noted claims the monitoring starting and the communication of the message of the monitored data does not require input from a device to which the message of the monitored data is to be communicated, and thus only a unidirectional communication is needed for those operations in the claims as currently written, in direct contrast to the disclosure in Allard.

In such ways, each of independent claims 1, 9, 17, and 25, and the claims dependent

therefrom, distinguish over <u>Allard</u>.

In addressing the arguments noted above the Office Action of March 29, 2004 states:

> This is not found persuasive. [Allard] clearly teaches and
> describes a method that involves initiating a connection request to an
> information server system by a <u>client system</u> or proxy server. Then
> responding, information requested, an acknowledgement enabling tracking
> and a location of a designated server. The session events are then
> monitored if a client tracking system is used, if not a usage log is
> generated. The usage log is then transmitted to the designated server. The
> method creates a usage log on a user's client computer and <u>periodically</u>
> <u>transmits the usage log from the user's client machine</u> to a usage tracking
> server computer to be incorporated in an overall usage log for a given
> information server computer. A proxy server may be connected between a
> client computer and an information server with the proxy server acting as
> a client to the information server and creating a usage log of the user's
> client computer access to the information server computer to be sent to
> usage tracking computer. [Allard] accurately reflects the user's usage and
> improves the quality of statistics tracked by the service provider, thus
> permitting usage tracking of remote clients.
>
> Examiner also asserts that applicants' device is also a bi-directional
> device. Examples of unidirectional devices are logic gate, CD player, and
> LEDs.[4]

First, applicants do not understand at all the above-noted statement as it does not lend

any clarification to what elements in <u>Allard</u> are being applied against the claims. The above-

noted basis for the outstanding rejection does not indicate what element in <u>Allard</u> is cited to

correspond to the claimed "device" nor what elements are cited to correspond to the claimed

"monitoring device" or "communicating device". The above-noted basis for maintaining the

outstanding rejection also does not address how such elements meet the claimed features

directed to the "device comprising an interface", "monitoring device", and "communicating

device".

Also, the Examiner's assertion that applicants' device is also a bi-directional device is

not at all understood. The claimed invention operates to perform monitoring of a user

---

[4] Office Action, March 24, 2004, page 3. (Original Emphasis.)

10

selecting operations on an interface of a device, and to send a log of that monitored data,

without requiring a communication from a device to which the monitored data is to be sent.

That is what the claims mean by "unidirectional" communication, and that is clearly reflected

in the claims. The statement that "applicants' device is also a bi-directional device" does not

appear remotely relevant to any issue. The issue is what the claims recite and whether the

teachings in Allard meet the claimed limitations. The claims clearly define the phrase

"unidirectional communication", and thus the statement in the March 29, 2004 Office Action

that "applicants' device is also a bi-directional device" is completely irrelevant and is not

understood as to how it relates to the rejection.

In view of the foregoing comments, applicants respectfully submit that clearly the

positively recited features in the claims distinguish over the teachings in Allard.

Thereby, it is clear that each of independent claims 1, 9, 17, and 25, and the claims

dependent therefrom, distinguish over the teachings in Allard.

The Dependent Claims

Moreover, the dependent claims recite further features neither taught nor suggested by

Allard in contrast to the positions stated in the March 29, 2004 Office Action.

Dependent Claims 3, 11, 19, 27

Dependent claims 3, 11, 19, and 27 further recite that the "target application is an

image forming device and the interface is an operation panel of the image forming device".

The only portion in Allard noted to meet that claim limitation was at column 4, lines 58-61,

and column 2, lines 29-40.[5] Clearly no teachings in Allard at those portions even addresses

such claimed features.

---

[5] Office Action of March 29, 2004, page 6, second paragraph of prenumbered point 3.

Dependent Claims 4, 12, 20, 28

Dependent claims 4, 12, 20, and 28 further recite "the target application is an appliance and the interface is an operation panel of the appliance". Again _Allard_ is cited at column 4, lines 58-61, and column 2, lines 29-40, to meet such limitations,[6] but clearly no portions of _Allard_ therein meet those features.

Dependent Claims 5, 13, 21, 29

Dependent claims 5, 13, 21, and 29 further recite "the communicating device sends the log of the monitor data when the user exits the target application". That feature also distinguishes over _Allard_. The Office Action cites _Allard_ at column 5, line 55, to column 6, line 7, to meet that claim limitation.[7] However, _Allard_ at that noted portion simply does not disclose any even similar subject matter.

Dependent Claims 6, 14, 22, 30

Dependent claims 6, 14, 22, and 30 further recite "a setting unit configured to set a number of sessions of the target application to be executed by the user prior to the communicating device communicating the log file of the monitored data".

The outstanding Office Action cites the teachings in _Allard_ at column 4, lines 62-65, to meet such claim limitations.[8]

However, at that portion _Allard_ broadly discloses permitting a session level, but does not teach or suggest any operation of setting a number of sessions to be executed prior to

---

[6] Office Action of March 29, 2004, page 6, second paragraph of prenumbered point 3.

[7] Office Action of March 29, 2004, page 6, last paragraph.

[8] Office Action of November 19, 2003, page 6, first paragraph.

12

communicating the log of the monitor data. Thus, claims 6, 14, 22, and 30 further distinguish over Allard.

Dependent Claims 7, 15, 23, 31

Dependent claims 7, 15, 23, and 31 further recite the "monitoring device encodes the monitored data into the log file and the communicating device decodes the monitored data from the log file by defining the encoding and decoding objects as abstract classes and defining derived classes to include encoding and decoding algorithms".

The outstanding Office Action cites Allard at Figure 3, the Abstract, column 11, lines 11-21, and column 11, line 61, to column 12, line 10, as meeting such claim limitations.[9]

Simply, those noted teachings in Allard are not at all directed to defining encoding and decoding objects as abstract classes and defining derived classes to include encoding and decoding algorithms. It is unclear on what basis the outstanding Office Action is even relying on such teachings in Allard.

Dependent Claims 8, 16, 24, 32

Dependent claims 8, 16, 24, and 32 further recite that the "communicating device communicates the log of the monitored data by Internet mail". That feature further distinguishes over Allard.

The outstanding Office Action cites the teachings in Allard in Figure 1 and at column 5, lines 36-43, to meet such limitations.[10]

However, applicants note that at Figure 1 and at column 5, lines 36-43, Allard is silent as to using Internet mail to communicate the log of the monitored data, and thus claims 8, 16, 24, and 32 even further distinguish over the teachings of Allard.

---

[9] Office Action of November 19, 2003, page 6, second paragraph.
[10] Office Action of March 29, 2004, page 7, first paragraph.
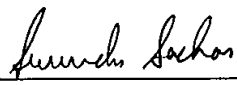
IX. CONCLUSION

For the foregoing reasons each of claims 1, 3-9, 11-17, 19-25, and 27-32 distinguishes over the teachings in <u>Allard</u>, and thereby the outstanding rejection must be REVERSED.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.

Customer Number

22850

Tel: (703) 413-3000
Fax: (703) 413 -2220
(OSMMN 08/03)
GJM:SNS:smi

Gregory J. Maier
Registration No. 25,599
Surinder Sachar
Registration No. 34,423
Attorneys of Record

I:\ATTY\SNS\5244\52440104\52440104-AB.DOC

14

APPENDIX

1. A system comprising:

a device comprising an interface, the interface comprising a plurality of operations to be selected by a user;

a monitoring device configured to monitor data of selecting of the plurality of operations of the interface by the user, and to encode and store the monitored data into a log file in the device;

a communicating device configured to receive the log file of the monitored data, to decode the stored encoded log file, to create a message of the monitored data, and to then communicate the message of the monitored data;

wherein the monitoring device includes a control to automatically start the monitoring without an input from a device to which the message of the monitored data is to be communicated, and

wherein the communicating device includes a control to automatically communicate the message of the monitored data by a unidirectional communication without requiring input from the device to which the message of the monitored data is to be communicated.

2. (Canceled).

3. A system according to Claim 1, wherein the device is an image forming device and the interface is an operation panel of the image forming device.

4. A system according to Claim 1, wherein the device is an appliance and the interface is an operation panel of the appliance.

15

5. A system according to Claim 1, wherein the communicating device sends the log of the monitored data when the user exits the device.

6. A system according to Claim 1, further comprising a setting unit configured to set a number of sessions of the device to be executed by the user prior to the communicating device communicating the log file of the monitored data.

7. A system according to Claim 1, wherein the monitoring device encodes the monitored data into the log file and the communicating device decodes the monitored data from the log file by defining the encoding and decoding objects as abstract classes and defining derived classes to include encoding and decoding algorithms.

8. A system according to any one of Claims 1-7, wherein the communicating device communicates the log of the monitored data by Internet mail.

9. A system comprising:

a device comprising interface means, the interface means for providing a plurality of operations to be selected by a user;

monitoring means for monitoring data of selecting of the plurality of operations of the interface means by the user, and for encoding and storing the monitored data into a log file in the device;

communicating means for receiving the log file of the monitored data, for decoding the stored encoded log file, for creating a message of the monitored data, and for communicating the message of the monitored data;

wherein the monitoring means includes a control to automatically start the monitoring

without an input from a device to which the message of the monitored data is to be

communicated, and

wherein the communicating means includes a control to automatically communicate

the message of the monitored data by a unidirectional communication without requiring input

from the device to which the message of the monitored data is to be communicated.

10. (Canceled).

11. A system according to Claim 9, wherein the device is an image forming device

and the interface means is an operation panel of the image forming device.

12. A system according to Claim 9, wherein the device is an appliance and the

interface means is an operation panel of the appliance.

13. A system according to Claim 9, wherein the communicating means sends the log

of the monitored data when the user exits the device.

14. A system according to Claim 9, further comprising a setting means for setting a

number of sessions of the device to be executed by the user prior to the communicating

means communicating the log of the monitored data.

15. A system according to Claim 9, wherein the monitoring means encodes the

monitored data into the log file and the communicating means decodes the monitored data

from the log file by defining the encoding and decoding objects as abstract classes and defining derived classes to include encoding and decoding algorithms.

16. A system according to any one of Claims 9-15, wherein the communicating means communicates the log of the monitored data by Internet mail.

17. A method of monitoring usage of an interface of a device, the interface including a plurality of operations to be selected by a user, comprising the steps of:

monitoring data of selecting the plurality of operations of the interface selected by the user;

generating a log file of the monitored data by encoding the monitored data and storing the encoded monitored data into the log file in the device; and

creating a message of the monitored data by reading the encoded monitored data from the log file and decoding the encoded monitored data, and communicating the message of the monitored data;

wherein the monitoring includes a control operation to automatically start the monitoring without an input from a device to which the message of the monitored data is to be communicated, and

wherein the communicating includes a control operation to automatically communicate the message of the monitored data by a unidirectional communication without requiring input from the device to which the message of the monitored data is to be communicated.

18. (Canceled).

19. A method according to Claim 17, wherein the device is an image forming device and the interface is an operation panel of the image forming device.

20. A method according to Claim 17, wherein the device is an appliance and the interface is an operation panel of the appliance.

21. A method according to Claim 17, wherein the communicating step sends the log of the monitored data when the user exits the device.

22. A method according to Claim 17, further comprising a step of setting a number of sessions of the device to be executed by the user prior to the communicating device communicating the log of the monitored data.

23. A system according to Claim 17, wherein the encoding step encodes the monitored data into the log file and the decoding step decodes the monitored data from the log file by defining the encoding and decoding objects as abstract classes and defining derived classes to include encoding and decoding algorithms.

24. A method according to any one of Claims 17-23, wherein the communicating step communicates the log of the monitored data by Internet mail.

25. A computer program product comprising:

a computer storage medium and a computer program code mechanism embedded in the computer storage medium for causing a computer to monitor a user's usage of an interface

of a device, the interface comprising a plurality of operations to be selected by a user,

comprising:

a first computer code device configured to monitor data of selecting of the plurality of

operations of the interface by the user, and to encode and store the monitored data into a log

file in the device;

a second computer code device configured to receive the log file of the monitored

data, to decode the stored encoded log file, to create a message of the monitored data, and to

then communicate the message of the monitored data;

wherein the first computer code device includes a control code to automatically start

the monitoring without an input from a device to which the message of the monitored data is

to be communicated, and

wherein the second computer code device includes a control code to automatically

communicate the message of the monitored data by a unidirectional communication without

requiring input from the device to which the message of the monitored data is to be

communicated.

26. (Canceled).

27. A computer program product according to Claim 25, wherein the device is an

image forming device and the interface is an operation panel of the image forming device.

28. A computer program product according to Claim 25, wherein the device is an

appliance and the interface is an operation panel of the appliance.

29. A computer program product according to Claim 25, wherein the second computer code device is further configured to send the log of the monitored data when the user exits the device.

30. A computer program product according to Claim 25, further comprising a third computer code device configured to set a number of sessions of the device to be executed by the user prior to the second computer code device communicating the log of the monitored data.

31. A computer program product according to Claim 25, wherein the second computer code device encodes the monitored data into the log file and decodes the monitored data from the log file by defining the encoding and decoding objects as abstract classes and defining derived classes to include encoding and decoding algorithms.

32. A computer program product according to any one of Claims 25-31, wherein the second computer code device is further configured to communicate the log of the monitored data by Internet mail.